

**WHAT IS CLAIMED IS:**

1. A video signal processor comprising:

an A/D converter for sampling an analog video signal at a first frequency and converting the analog video signal into a digital video signal;

a Y/C separator for separating the digital video signal into a first luminance signal and a first chrominance signal;

a chroma decoder for demodulating the first chrominance signal into a first set of color-difference signals;

a first D/D converter for re-sampling the first luminance signal and the first set of color-difference signals at a second frequency;

a digital codec for digitally encoding the first luminance signal and the first set of color-difference signals, which have been output from the first D/D converter, to produce a write signal, and for sampling a digitally encoded read signal at the second frequency to decode the read signal into a second luminance signal and a second set of color-difference signals;

a chroma encoder for modulating the second set of color-difference signals into a second chrominance signal;

data selecting means for selecting either the first luminance and first chrominance signals, which have been output from the separator, or the second luminance and second chrominance signals, which have been output from the codec and

the encoder, respectively;

clock selecting means for selecting a first clock signal with the first frequency if the data selecting means has selected the first luminance and first chrominance signals or a second clock signal with the second frequency if the data selecting means has selected the second luminance and second chrominance signals; and

D/A converters for sampling the luminance and chrominance signals that have been selected by the data selecting means at the frequency of the clock signal that has been selected by the clock selecting means, and for converting the luminance and chrominance signals into analog signals.

2. The processor of Claim 1, further comprising amplitude correcting means for making up a difference in amplitude between the first luminance and first chrominance signals output from the separator and the second luminance and second chrominance signals output from the codec and the encoder, respectively.

3. The processor of Claim 2, wherein the correcting means comprises an amplitude changer for changing the amplitude of the first luminance and first chrominance signals output from the separator.

4. The processor of Claim 2, wherein the correcting means comprises an amplitude changer for changing the amplitude of the second luminance and second chrominance signals output from the codec and the encoder, respectively.

5. A video signal processor comprising:

an A/D converter for sampling an analog video signal at a first frequency and converting the analog video signal into a digital video signal;

a Y/C separator for separating the digital video signal into a first luminance signal and a first chrominance signal;

a chroma decoder for demodulating the first chrominance signal into a first set of color-difference signals;

a first D/D converter for re-sampling the first luminance signal and the first set of color-difference signals at a second frequency;

a digital codec for digitally encoding the first luminance signal and the first set of color-difference signals, which have been output from the first D/D converter, to produce a write signal, and for sampling a digitally encoded read signal at the second frequency to decode the read signal into a second luminance signal and a second set of color-difference signals;

a second D/D converter for re-sampling the second luminance signal and the second set of color-difference signals

at the first frequency;

a chroma encoder for modulating the second set of color-difference signals, output from the second D/D converter, into a second chrominance signal;

data selecting means for selecting either the first luminance and first chrominance signals, which have been output from the separator, or the second luminance and second chrominance signals, which have been output from the second D/D converter and the encoder, respectively; and

D/A converters for sampling the luminance and chrominance signals, which have been selected by the data selecting means, at the first frequency and converting the luminance and chrominance signals into analog signals.

#### 6. A video signal processor comprising:

an A/D converter for sampling an analog video signal at a first frequency and converting the analog video signal into a digital video signal;

a Y/C separator for separating the digital video signal into a first luminance signal and a first chrominance signal;

a chroma decoder for demodulating the first chrominance signal into a first set of color-difference signals;

a first D/D converter for re-sampling the first luminance signal and the first set of color-difference signals at a second frequency;

a digital codec for digitally encoding the first luminance signal and the first set of color-difference signals, which have been output from the first D/D converter, to produce a write signal, and for sampling a digitally encoded read signal at the second frequency to decode the read signal into a second luminance signal and a second set of color-difference signals;

a second D/D converter for re-sampling the second luminance signal and the second set of color-difference signals at the first frequency;

data selecting means for selecting either the first luminance signal and the first set of color-difference signals, which have been output from the separator and the decoder, respectively, or the second luminance signal and the second set of color-difference signals, which have been output from the second D/D converter; and

a chroma encoder for modulating the first or second set of color-difference signals, selected by the data selecting means, into a second chrominance signal; and

D/A converters for sampling the luminance signal, selected by the data selecting means, and the second chrominance signal, output from the encoder, at the first frequency and converting the luminance and chrominance signals into analog signals.

7. A video signal processor comprising:

an A/D converter for sampling an analog video signal at a first frequency and converting the analog video signal into a digital video signal;

a Y/C separator for separating the digital video signal into a first luminance signal and a first chrominance signal;

a chroma decoder for demodulating the first chrominance signal into a first set of color-difference signals;

a first D/D converter for re-sampling the first luminance signal and the first set of color-difference signals at a second frequency;

a digital codec for digitally encoding the first luminance signal and the first set of color-difference signals, which have been output from the first D/D converter, to produce a write signal, and for sampling a digitally encoded read signal at the second frequency to decode the read signal into a second luminance signal and a second set of color-difference signals;

data selecting means for selecting either the first luminance signal and the first set of color-difference signals output from the first D/D converter or the second luminance signal and the second set of color-difference signals output from the codec;

a chroma encoder for modulating the first or second set of color-difference signals, selected by the data selecting

means, into a second chrominance signal; and

D/A converters for sampling the luminance signal, selected by the data selecting means, and the second chrominance signal, output from the encoder, at the second frequency and converting the luminance and chrominance signals into analog signals.